

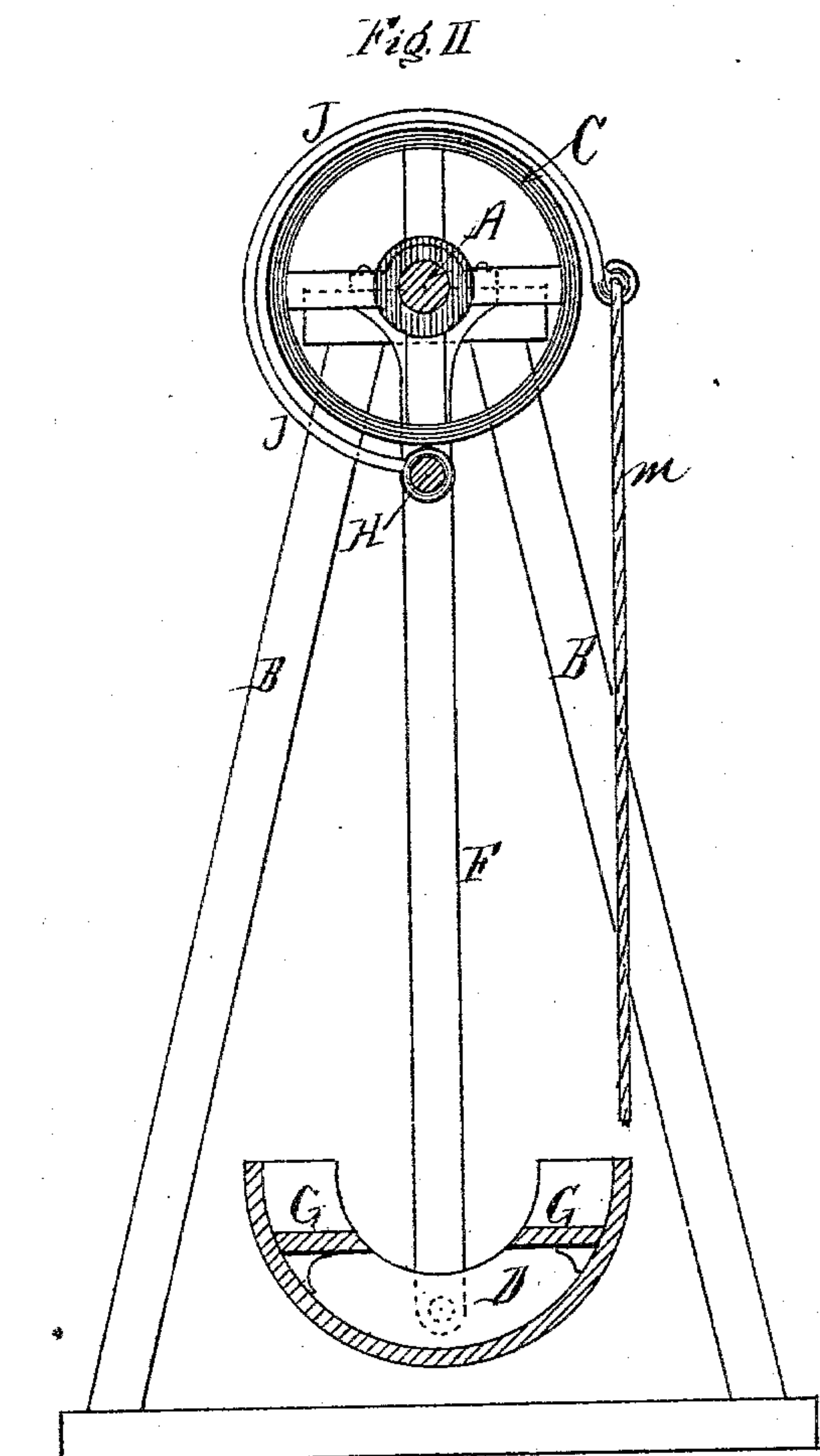
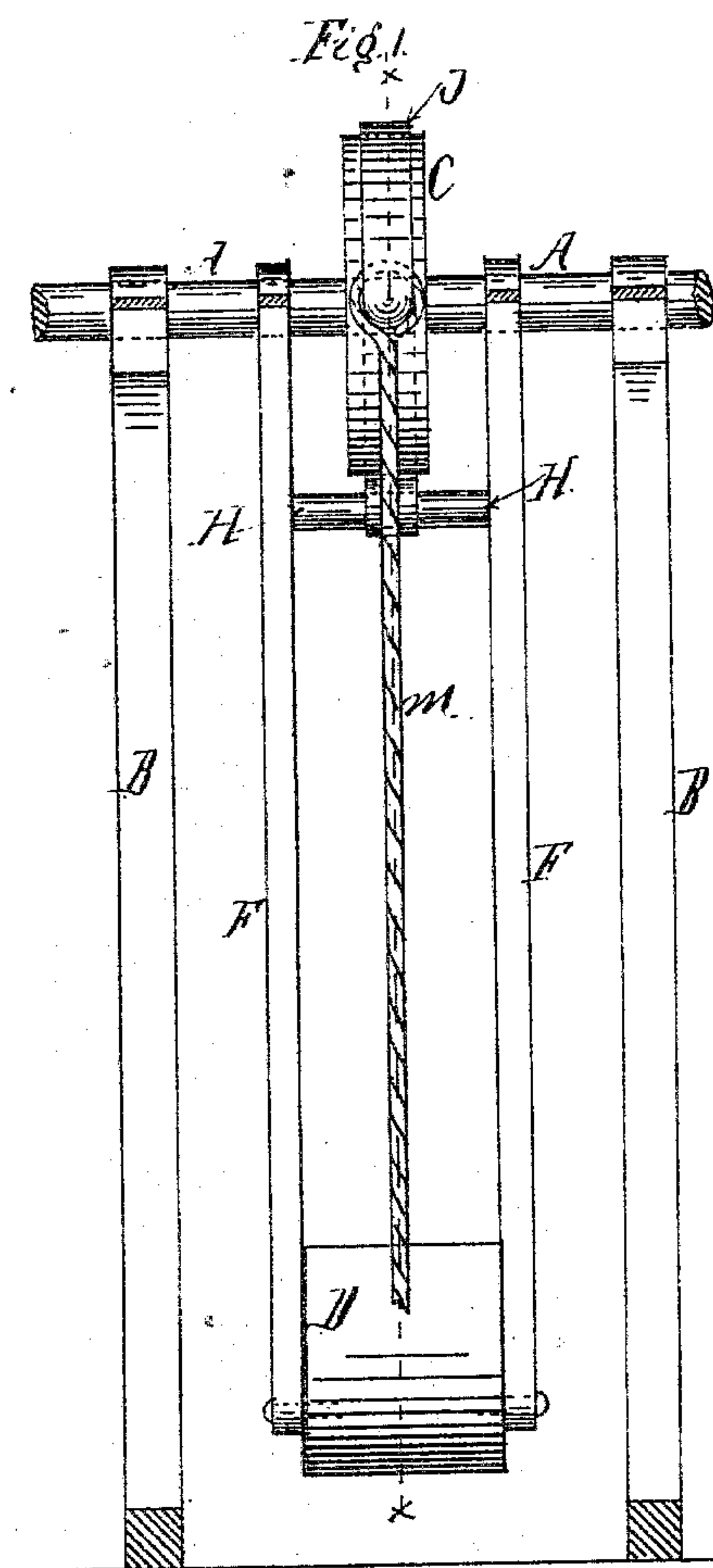
(No Model.)

I. N. FORRESTER.

SWING.

No. 283,388.

Patented Aug. 21, 1883.



Witnesses:  
*Frank B. Smith*  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

ISAAC N. FORRESTER, OF CAMDEN, NEW JERSEY.

## SWING.

SPECIFICATION forming part of Letters Patent No. 283,388, dated August 21, 1883.

Application filed July 11, 1882. Renewed July 23, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC N. FORRESTER, of Camden, county of Camden, and State of New Jersey, have invented a certain new and valuable Improvement in Swings; and I do hereby declare that the following is a clear and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

10 The object of this invention is to produce a swing which can be moved by friction instead of by the user of the swing, as has been done heretofore.

Referring to the drawings, Figure 1 is a front view of a swing embodying my invention. Fig. 15 2 is a sectional view of the same.

A is a longitudinal shaft supported in upright frames B B. On this shaft is fastened the wheel C.

20 D is the swing-cradle, supported on the arms F F, journaled to the shaft A, and this cradle is provided with a seat or seats, G.

H is a cross-piece supported between the arms F F. To this cross-piece is attached the spring friction-belt J, made of metal or any other material. To the free end K of the friction belt or band J is attached a rope, M, which extends down to within reach of the occupant of the swing-cradle.

30 To use my invention the first thing to be done is to cause the shaft A to rotate, carrying the wheel C. This can be done by steam, or by any power which will most cheaply accomplish the same, and must be continued as long as the swings are to be used. The person using the swing then gets into the swing-cradle, and, by pulling the rope M, brings the friction belt or band J down upon the revolving wheel C. By doing so enough friction is created to cause 40 the swing to move in the same direction as the

revolving wheel C on the shaft A. Now, when the swing-cradle has been raised high enough in the air, the occupant slackens the rope M, the wheel C is released from the pressure of the friction-belt J, and the swing is released 45 and allowed to fall or swing back. To raise the swing again the occupant has to pull on the rope M again, and the swing will repeat the movement.

By this construction a swing can be moved 50 with much less labor to the user. Heretofore all swings have had to be used and raised by the laborious exertions of the user. By this invention the occupant can raise the swing as high as he wishes it to go, and to do it requires 55 only the labor of pulling the rope M to give the required friction.

I do not wish to confine myself to the use of the friction belt or band J as a means of creating friction, as I am aware that other and 60 equivalent means can be used to accomplish the same result.

Having thus described my invention, I desire to claim—

1. The combination, in a swing, of the shaft 65 A, carrying the wheel C, and the swing-cradle D, suspended by the arms F F, with the cross-piece H, substantially as and for the purpose set forth.

2. The band J, or its equivalent, in combination with the wheel C on the shaft A in a swing, said band being used substantially as 70 and for the purpose set forth.

This specification signed this 23d day of March, 1882.

ISAAC N. FORRESTER.

Witnesses:

C. BARRITT,  
J. H. DUNBAR.